Cool-down and leak detector
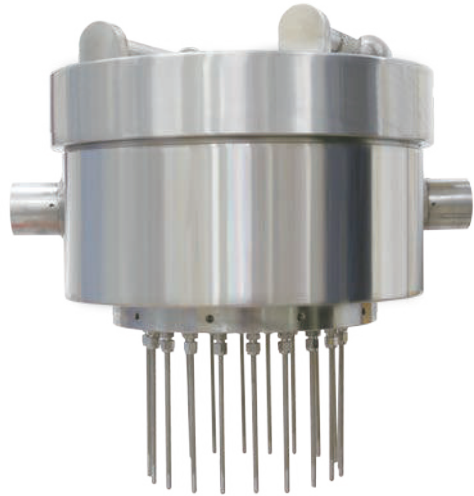## Model : R190 (RL series)

Service intended

R190 series are explosion proof temperature sensors with a high accuracy and a high reliability for cryogenic industries such as LNG tank terminal and oxygen generator. The temperature sensors are available as RTD depending on the usage, and it can be designed according to user's request. Furthermore, these sensors can be manufactured according to the requested specification of flange or thread for required measuring points.

Standard features

Junction box
316SS

Element
Pt 100Ω at 0℃

Sheath material
316L SS

Degree of protection
EN60529/IEC529/IP56
EN60529/IEC529/IP66

Sheath outer diameter
3.2, 4.8 and 6.4 mm

Temperature range
-200 ~ 100 ℃

Maximum measuring points
15 points

Tolerances on temperature reading
Class A : ± (0.15 + 0.002 l t l)
Class B : ± (0.3 + 0.005 l t l)

Certificates
KCS Ex d IIC T6

Main order

1. Base model

R190 Cool-down and leak detector

2. Junction box

H Explosion proof type

Z Other

3. Element (Tolerance)

Q Pt 100Ω (B)

9 Pt 100Ω (A)

4. Sheath material

1 316L SS

9 Other

5. Sheath outer diameter (mm)

D 3.2

E 4.8

F 6.4

6. Measuring point

01 1

02 2

03 3

04 4

05 5

06 6

07 7

08 8

09 9

10 10

11 11

12 12

13 13

14 14

15 15

7. Conduit connection

3 ½" NPT

6 ¾" NPT

7 None

8 M20 x 1.5P

9 Other

8. Connection type

XX Refer to insert length table (12th and 13th character)

9. Insert length

X Refer to insert length table (14th character)

10. Option

0 None

1 Accessories

1	2	3	4	5	6	7	8	9	10	
R190	H	Q	1	F	12	3	XX	X	1	**Sample ordering code**

Mounting, connection type and insert length table - 12th thru 14th characters

12th character		13th character		14th character	
Code	Connection size and connector material	Code	Connection type	Code	Insert length (m)
A	None	A	None	A	2
B	⅛" and 304SS	B	PT	B	3
C	¼" and 304SS	C	NPT	C	4
D	⅜" and 304SS	D	PF	D	5
E	½" and 304SS	E	NPS	E	6
F	¾" and 304SS	F	UNF	F	7
G	1" and 304SS	G	BSPT	G	8
H	1¼" and 304SS	H	BSPF	H	9
J	1½" and 304SS	J	MM	J	10
K	2" and 304SS	K	B16.5 Class 150 RF	K	15
L	3" and 304SS	L	B16.5 Class 150 FF	L	20
M	⅞₆" and 304SS	M	B16.5 Class 300 RF	M	25
N	⅛" and 316SS	N	B16.5 Class 300 FF	N	30
P	¼" and 316SS	O	Sanitary	P	35
Q	⅜" and 316SS	P	B16.5 Class 600 RF	Q	40
R	½" and 316SS	Q	B16.5 Class 600 FF	R	45
S	¾" and 316SS	R	JIS 5K RF	S	50
T	1" and 316SS	S	JIS 5K FF	Z	Other
U	1¼" and 316SS	T	JIS 10K RF		
V	1½" and 316SS	U	JIS 10K FF		
W	2" and 316SS	V	JIS 20K RF		
X	3" and 316SS	W	JIS 20K FF		
Y	⅞₆" and 316SS	X	B16.5 Class 1,500 RTJ		
Z	Other	Y	B16.5 Class 2,500 RTJ		
		Z	Other		

■ Note for 14th character, please choose a code of next higher length if applicable length is not. Actual length shall be specified.